TECH PUBLIC
台舟电子

BZT52C3V9T

150m Watt Zener Voltage Regulators

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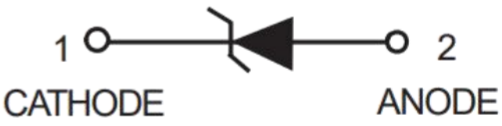
Features

- Low Zener Impedance
- Power Dissipation of 150mW
- High Stability and High Reliability
- Halogen free and RoHS compliant
- SOD523 surface mount package

Applications

- General voltage regulation
- Mobile & handheld systems
- Household Electric Appliances
- Industrial automation
- communication field

SOD523



Pin Configuration

Maximum Ratings& Thermal Characteristics

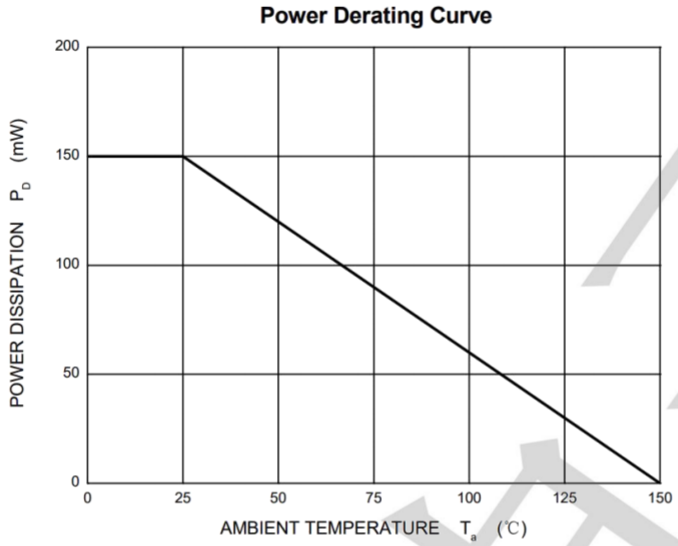
(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage @ IF=10mA	VF	0.9	V
Power Dissipation	PD	150	mW
Thermal Resistance (Junction-to-Ambient)	RθJA	883	°C/W
Thermal Resistance (Junction-to-Case)	RθJC	623	°C/W
Junction Temperature Range	TJ	150	°C
Storage Temperature Range	TSTG	-55 ~ +150	°C

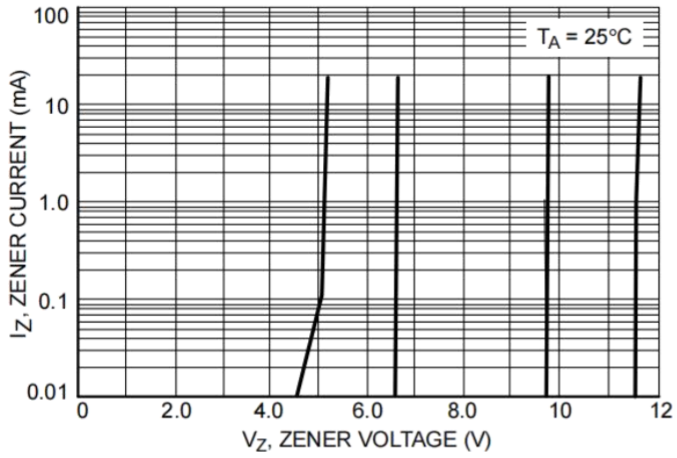
Electrical Characteristics (TA=25°C unless otherwise specified)

Type Number	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature Coefficient@ I_{ZTC} mV/℃		Test Current I_{ZTC}
	V_Z@I_Z T			I_{ZT}	Z_{ZT}@ I_{ZT}	Z_{ZK}@ I_{ZK}	I_{ZK}	I_R	@V_R			
	Nom (V)	Min (V)	Max (V)	mA	Ω		mA	μA	V	Min	Max	mA
BZT52C3V9T	3.7	3.9	4.1	5	100	600	1.0	50	1.0	-3.5	0	5

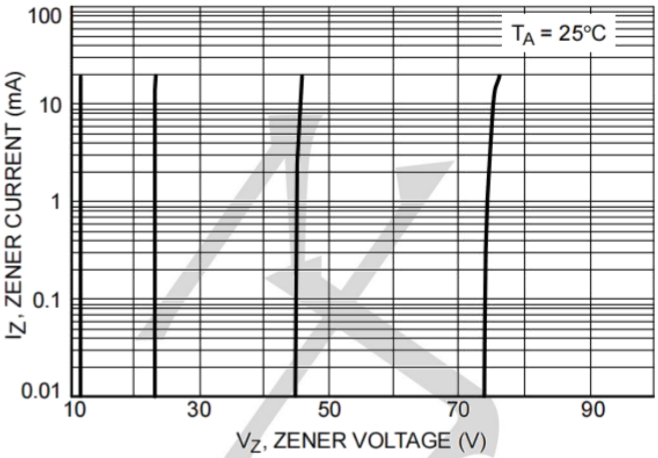
Typical Characteristics Curves



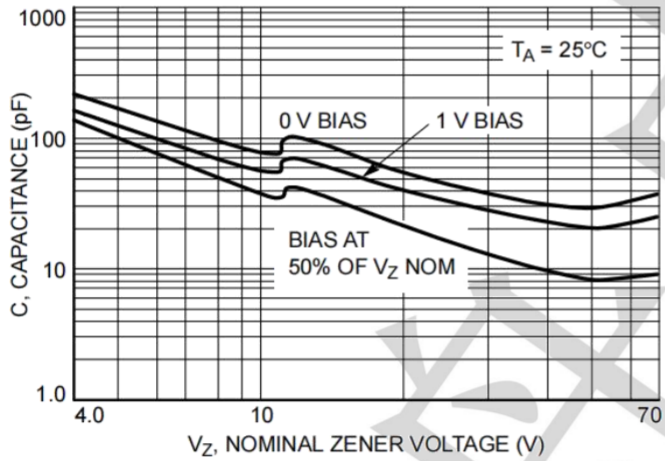
Typical Characteristics Curves



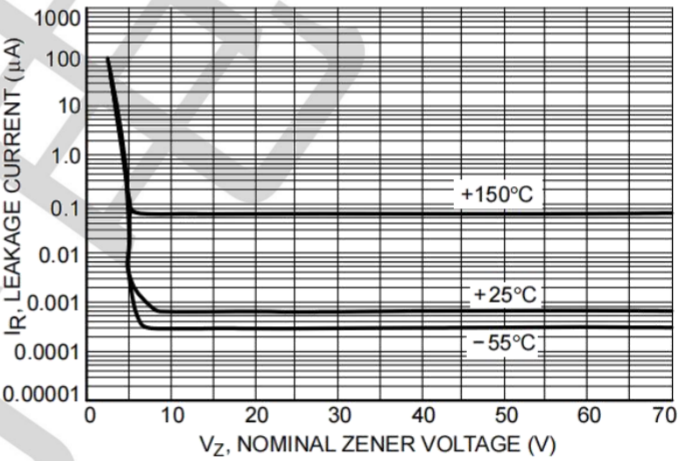
Zener Voltage versus Zener Current (V_Z Up to 12 V)



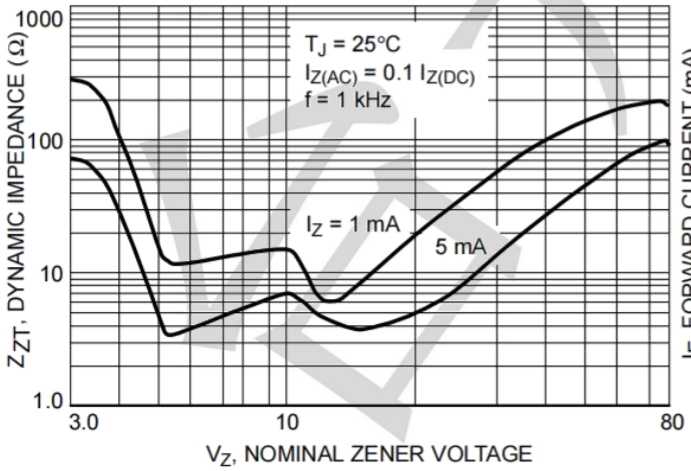
Zener Voltage versus Zener Current (12 V to 75 V)



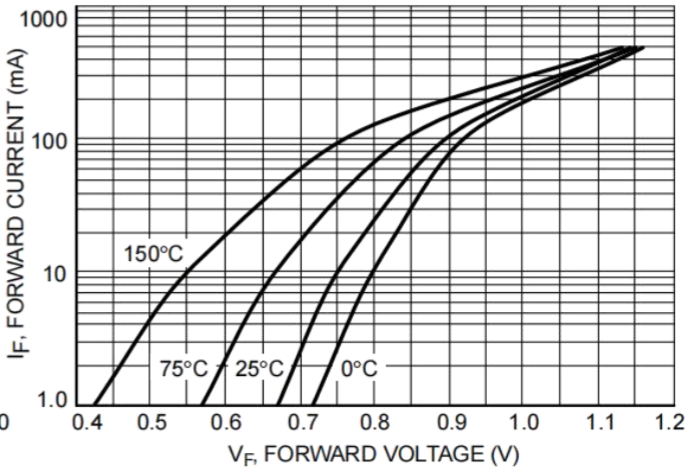
Typical Capacitance



Typical Leakage Current



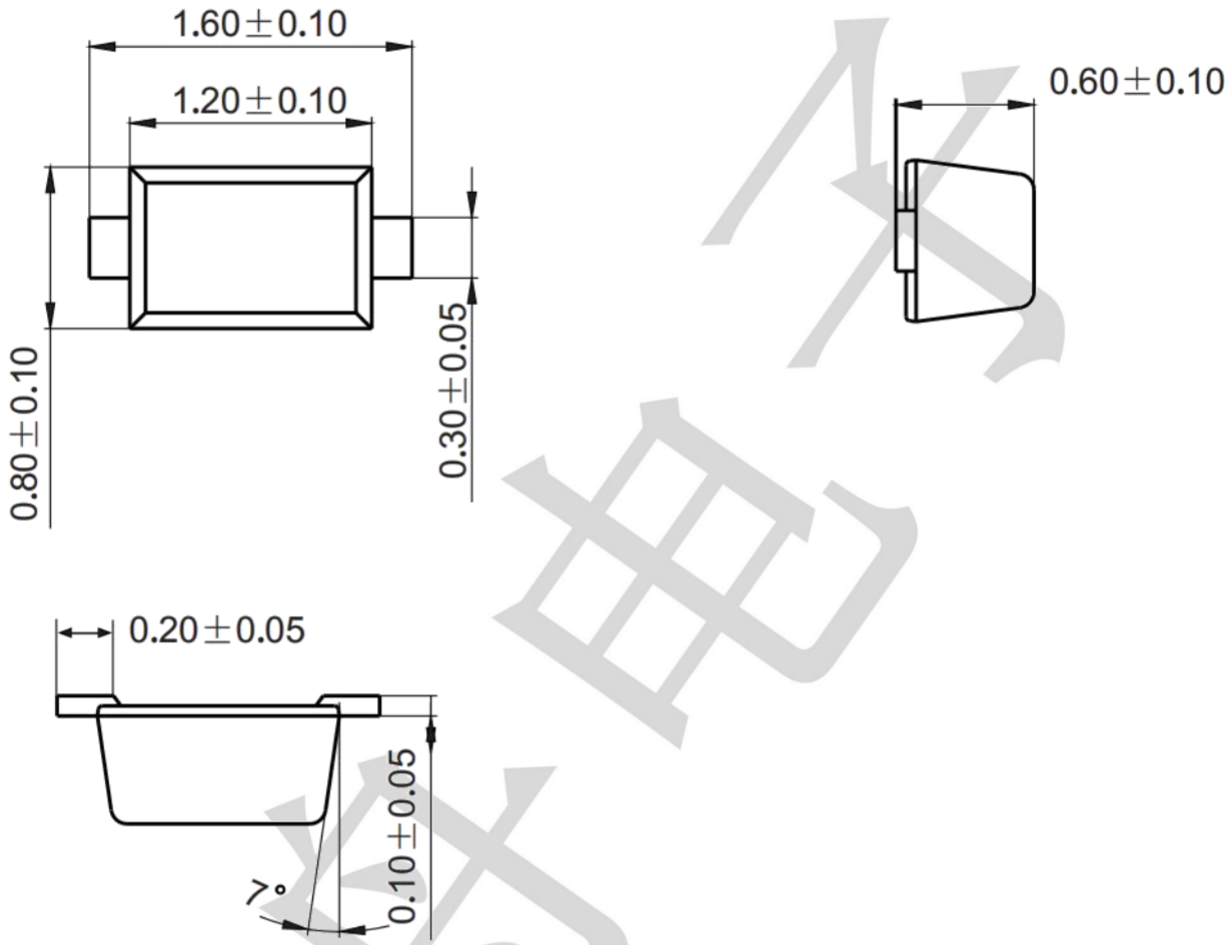
Effect of Zener Voltage on Zener Impedance



Typical Forward Voltage

Package Outline Dimensions (unit: mm)

SOD523



Mounting Pad Layout (unit: mm)